STN Search History

(FILE 'HOME' ENTERED AT 17:02:44 ON 06 APR 2003)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 17:03:30 ON 06 APR 2003

SEA (HEPATITIS (A) A OR HAV) (S) (VACCINE OR ANTIGEN## OR IMMUN

3	FILE ADISCTI
1	FILE ADISNEWS

SEA (HEPATITIS (A) A OR HAV) (S) (VACCINE OR ANTIGEN## OR IMMUN

3	FILE ADISCTI
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1	FILE BIOCOMMERCE
25	FILE BIOSIS
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2*	FILE FEDRIP
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16	FILE LIFESCI
25	FILE MEDLINE
11	FILE PASCAL
16	FILE PROMT
23	FILE SCISEARCH
6	FILE TOXCENTER
199	FILE USPATFULL
4	FILE USPAT2
7	FILE WPIDS
7	FILE WPINDEX

L1 QUE (HEPATITIS (A) A OR HAV) (S) (VACCINE OR ANTIGEN## OR IMMUN

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, BIOTECHNO' ENTERED AT 17:14:22 ON 06 APR 2003

L2 124 S (HEPATITIS (A) A OR HAV) (S) (VACCINE OR ANTIGEN## OR IMMUN##
L3 50 DUP REM L2 (74 DUPLICATES REMOVED)
L4 35 S L3 AND (PEPTIDE OR ANTIGEN OR FRAGMENT)
L5 21 S L4 NOT PY>1997
L6 32 S L3 NOT PY>1997
L7 11 S L6 NOT L5

L1 QUE (HEPATITIS (A) A OR HAV) (S) (VACCINE OR ANTIGEN## OR IMMUN#######) AND (NONSTRUCTURAL OR NON-STRUCTURAL OR (P2 OR P2A) (5N) PROTEIN)

L2 124 (HEPATITIS (A) A OR HAV) (S) (VACCINE OR ANTIGEN## OR IMMUN######) AND (NONSTRUCTURAL OR NON-STRUCTURAL OR (P2 OR P2A) (5N) PROTEIN)

L5 ANSWER 1 OF 21 MEDLINE
TI Interferon-alpha treatment induces delayed CD4 proliferative responses to the hepatitis C virus **nonstructural** protein 3 regardless of the outcome of therapy.
SO JOURNAL OF INFECTIOUS DISEASES, (1997 Jun) 175 (6) 1294-301.
Journal code: 0413675. ISSN: 0022-1899.
AU Zhang Z X; Milich D R; Peterson D L; Birkett A; Schvarcz R; Weiland O; Sallberg M

L5 ANSWER 2 OF 21 MEDLINE
TI Identification of hepatitis A virus **non-structural** protein 2B and its release by the major virus protease 3C.
SO JOURNAL OF GENERAL VIROLOGY, (1996 Feb) 77 (Pt 2) 247-55.
Journal code: 0077340. ISSN: 0022-1317.
AU Gosert R; Cassinotti P; Siegl G; Weitz M

L5 ANSWER 3 OF 21 MEDLINE
TI Seroepidemiology of hepatitis E virus in the Egyptian Nile Delta.
SO JOURNAL OF MEDICAL VIROLOGY, (1995 Dec) 47 (4) 399-403.
Journal code: 7705876. ISSN: 0146-6615.
AU Kamel M A; Troonen H; Kapprell H P; el-Ayady A; Miller F D

L5 ANSWER 4 OF 21 MEDLINE
TI **Immune** response to **a hepatitis** C virus **nonstructural** protein in chronic hepatitis C virus infection.
SO JOURNAL OF HEPATOLOGY, (1994 Sep) 21 (3) 403-11.
Journal code: 8503886. ISSN: 0168-8278.
AU Tsai S L; Chen P J; Hwang L H; Kao J H; Huang J H; Chang T H; Chen D S

L5 ANSWER 5 OF 21 MEDLINE
TI Early detection of anti-HCc antibody in acute hepatitis C virus (HCV) by western blot (immunoblot) using a recombinant HCV core protein **fragment**.
SO JOURNAL OF CLINICAL MICROBIOLOGY, (1994 Sep) 32 (9) 2235-41.
Journal code: 7505564. ISSN: 0095-1137.
AU Yeh C T; Han C M; Lo S Y; Ou J H; Fan K D; Sheen I S; Chu C M; Liaw Y F

L5 ANSWER 6 OF 21 MEDLINE
TI [Synthesis and **antigenic** activity of **peptides** from the C-terminal part of the NS4-protein of the **hepatitis A** virus].
Sintez i antigennaia aktivnost' peptidov iz C-kontsevoi chasti nestrukturnogo NS4-belka virusa gepatita C.
SO BIOORGANICHESKAIA KHIMIIA, (1993 Nov) 19 (11) 1128-31.
Journal code: 7804941. ISSN: 0132-3423.
AU Semiletov Iu A; Firsova T V; Kuzin S N; Khudiakov Iu E; Shibnev V A

L5 ANSWER 7 OF 21 MEDLINE
TI Hepatitis C virus c100 **antigen** in liver tissue from patients with acute and chronic infection.
SO HEPATOLOGY, (1993 Aug) 18 (2) 240-5.
Journal code: 8302946. ISSN: 0270-9139.
AU Sansonno D; Dammacco F

L5 ANSWER 8 OF 21 MEDLINE
TI Antibody response to **nonstructural** proteins of hepatitis A virus following infection.
SO JOURNAL OF MEDICAL VIROLOGY, (1993 May) 40 (1) 76-82.
Journal code: 7705876. ISSN: 0146-6615.
AU Robertson B H; Jia X Y; Tian H; Margolis H S; Summers D F; Ehrenfeld E

L5 ANSWER 9 OF 21 MEDLINE
TI Prevalence of hepatitis C viral infection in a community in Taiwan. Detection by synthetic **peptide**-based assay and polymerase chain reaction.
SO JOURNAL OF HEPATOLOGY, (1993 Feb) 17 (2) 192-8.
Journal code: 8503886. ISSN: 0168-8278.
AU Sheu J C; Wang J T; Wang T H; Wang C Y; Yang P M; Huang G T; Shih L N; Lee H S; Chen D S

L5 ANSWER 10 OF 21 MEDLINE
TI Serological approaches to distinguish **immune** response to **hepatitis A vaccine** and natural infection.
SO VACCINE, (1992) 10 Suppl 1 S106-9.
Journal code: 8406899. ISSN: 0264-410X.
AU Robertson B H; Jia X Y; Tian H; Margolis H S; Summers D F; Ehrenfeld E

L5 ANSWER 11 OF 21 MEDLINE
TI Hepatitis C virus infection in medical personnel after needlestick accident.
SO HEPATOLOGY, (1992 Nov) 16 (5) 1109-14.
Journal code: 8302946. ISSN: 0270-9139.
AU Mitsui T; Iwano K; Masuko K; Yamazaki C; Okamoto H; Tsuda F; Tanaka T; Mishiro S

L5 ANSWER 12 OF 21 MEDLINE
TI Host antibody response to viral structural and **nonstructural** proteins after hepatitis A virus infection.
SO JOURNAL OF INFECTIOUS DISEASES, (1992 Feb) 165 (2) 273-80.
Journal code: 0413675. ISSN: 0022-1899.
AU Summers D F; Ehrenfeld E

L5 ANSWER 13 OF 21 MEDLINE
TI Two French genotypes of hepatitis C virus: homology of the predominant genotype with the prototype American strain.
SO GENE, (1991 Sep 15) 105 (2) 167-72.
Journal code: 7706761. ISSN: 0378-1119.
AU Li J S; Tong S P; Vitvitski L; Lepot D; Trepo C

L5 ANSWER 14 OF 21 MEDLINE
TI **Antigenic** and genetic variation in cytopathic **hepatitis A** virus variants arising during persistent infection: evidence for genetic recombination.
SO JOURNAL OF VIROLOGY, (1991 Apr) 65 (4) 2056-65.
Journal code: 0113724. ISSN: 0022-538X.
AU Lemon S M; Murphy P C; Shields P A; Ping L H; Feinstone S M; Cromeans T; Jansen R W

L5 ANSWER 15 OF 21 MEDLINE
TI Identification of a rabies virus T cell epitope on the basis of its similarity with **a hepatitis** B surface **antigen peptide** presented to T cells by the same MHC molecule (HLA-DPw4).
SO JOURNAL OF IMMUNOLOGY, (1990 Jul 1) 145 (1) 305-10.
Journal code: 2985117R. ISSN: 0022-1767.
AU Celis E; Larson J; Otvos L Jr; Wunner W H

L5 ANSWER 16 OF 21 MEDLINE
TI [Detection of hepatitis A virus RNA by molecular hybridization]. Obnaruzhenie RNK virusa gepatita A metodom molekuliarnoi gibridizatsii.
SO VOPROSY VIRUSOLOGII, (1988 Sep-Oct) 33 (5) 548-54.
Journal code: 0417337. ISSN: 0507-4088.

AU Kusov Iu Iu; Kazachkov Iu A; Grabko V I; Nastashenko T A; Balaian M S

L5 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2003 ACS
TI Hepatitis GBV-C sequences in patients infected with HCV contaminated anti-D immunoglobulin and among i.v. drug users in Germany
SO Journal of Hepatology (1996), 25(3), 385-389
CODEN: JOHEEC; ISSN: 0168-8278
AU Schreier, Eckart; Hoehne, Marina; Kuenkel, Udo; Berg, Thomas; Hopf, Uwe

L5 ANSWER 18 OF 21 CAPLUS COPYRIGHT 2003 ACS
TI Physiochemical and immunological characterization of hepatitis A virus nucleocapsids expressed in a vaccinia virus/T7/EMCV system
SO Archives of Virology (1994), 135, 443-9
CODEN: ARVIDF; ISSN: 0304-8608
AU Zhu, N. L.; Li, G. D.; Wang, Y.

L5 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2003 ACS
TI Recombinant production of **hepatitis A** virus proteins and their use as **vaccines**
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
IN Ovchinnikov, Yu. A.; Sverdlov, E. D.; Tsarev, S. An.; Frolova, E. I.; Rokhlina, T. O.; Rostapshov, V. M.; Azhikina, T. L.; Arsenyan, S. G.; Snezhkov, E. V.; et al.

L5 ANSWER 20 OF 21 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI Preliminary study on the method for detecting IgM antibody to hepatitis C virus.
SO Virologica Sinica, (1996) Vol. 11, No. 3, pp. 264-267.
ISSN: 1003-5125.
AU He Hongxia, Hong Shiwen; Mao Panyong; Bai Yangping

L5 ANSWER 21 OF 21 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
TI Serological approaches to distinguish **immune** response to **hepatitis A vaccine** and natural infection
SO Vaccine, (1992), 10/SUPPL. 1 (S106-S109)
CODEN: VACCDE ISSN: 0264-410X
AU Robertson B.H.; Jia X.-Y.; Tian H.; Margolis H.S.; Summers D.F.; Ehrenfeld E.

L5 ANSWER 21 OF 21 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
AN 1992:22360466 BIOTECHNO
TI Serological approaches to distinguish **immune** response to **hepatitis A vaccine** and natural infection
AU Robertson B.H.; Jia X.-Y.; Tian H.; Margolis H.S.; Summers D.F.; Ehrenfeld E.
CS Hepatitis Branch A33, Div. Viral/Rickettsial Diseases, Nat. Cent. for Infectious Diseases,Atlanta, GA 30333, United States.
SO Vaccine, (1992), 10/SUPPL. 1 (S106-S109)
CODEN: VACCDE ISSN: 0264-410X
DT Journal; Conference Article
CY United Kingdom
LA English
SL English
AB Currently, the **immune** status of an individual exposed to **hepatitis A** virus (**HAV**) is determined by assays which measure antibodies against the capsid proteins. These assays indicate exposure to the viral capsid that could result from either infection or from vaccination. Recent data indicate that proteins from the **non-structural** genome region of the virus (P2 or P3), which are only produced during active virus replication, generate antibodies after clinical disease. A sub-genomic cDNA segment of **HAV** corresponding to the P2 region was used for in vitro transcription-translation followed by **immune** precipitation of the translated products under non-denaturing conditions. Serial serum specimens from experimentally infected chimpanzees and humans naturally infected with **hepatitis A** verified the development of antibodies to **P2 proteins** following infection. A serosurvey of individuals positive for antibodies to the **HAV** capsid (HAVAB assay, Abbott Laboratories) revealed that 50-60% of children and 16-32% of adults had no detectable antibodies to the P2 **antigen** by **immune** precipitation. These results may reflect subclinical infections resulting in a lower level of antibodies against the **non-structural antigens** or may represent a greater sensitivity of the competitive assay (HAVAB) used to detect capsid antibodies compared to the immunoprecipitation assay used to detect **non-structural antigens**.

L5 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2003 ACS
AN 1989:129894 CAPLUS
DN 110:129894
TI Recombinant production of **hepatitis A** virus proteins and their use as **vaccines**
IN Ovchinnikov, Yu. A.; Sverdlov, E. D.; Tsarev, S. An.; Frolova, E. I.; Rokhlina, T. O.; Rostapshov, V. M.; Azhikina, T. L.; Arsenyan, S. G.; Snezhkov, E. V.; et al.
PA Shemyakin, M. M., Institute of Bioorganic Chemistry, USSR; Institute of Poliomyelitis and Viral Encephalitis, Academy of Medical Sciences, U.S.S.R.; All-Union Scientific-Research Institute of Molecular Biology; Moscow Scientific-Research Institute of Viral Preparations
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DT Patent
LA Russian
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 8800973	A1	19880211	WO 1987-SU85	19870731
W: JP, US				
RW: CH, DE, FR, GB				

	SU 1469856	A1	19900930	SU 1986-4102079	19860731
	EP 276330	A1	19880803	EP 1987-905562	19870731
	R: CH, DE, FR, GB, LI				
	JP 01500485	T2	19890223	JP 1987-504983	19870731
PRAI	SU 1986-4102079		19860731		
	WO 1987-SU85		19870731		

AB Plasmid vectors contg. a DNA **fragment** encoding hepatitis A virus proteins VP1, VP3, VP4 into the **nonstructural** protein region or the latter fused to a sequence encoding viral proteinase, or a synthetic DNA sequence corresponding to amino acids (aa) 11-25 of VP1 and either a marker galactosidase gene of Escherichia coli or a human .gamma.-interferon gene were constructed. Vectors were amplified and expressed in E. coli or used to transform CV1 cells that had been infected with vaccinia virus. Vaccinia virus recombinants contg. the hepatitis A virus protein-encoding sequence were recovered from the latter and used to transfect RAT-2 cells. Hepatitis virus proteins expressed in E. coli or RAT-2 cells were recovered after cell lysis and used to immunize guinea pigs or rabbits. The PstI **fragment** of plasmid pHAV23 contg. a 3372 bp sequence encoding hepatitis A virus protein VP4 from aa 38 into the **nonstructural** protein region was inserted into the polylinker in plasmid pSPVV. The recombinant plasmid pSP-VV-HAV-D was amplified in E. coli, recovered, and used to transform vaccinia virus-infected CV1 cells. The viral particles obtained were propagated on a RAT2 cell culture and the **hepatitis A** proteins in a lysate prepn. (5 x 109 particles/mL) were used to **immunize** rabbits. After 3-4 days a specific inflammatory reaction was elicited and after 3-4 wk the blood serum of the treated rabbits showed anti-vaccinia virus titers of 1:640, 1:1280. The serum also contained hepatitis A virus antibody.

L5 ANSWER 14 OF 21 MEDLINE
AN 91162758 MEDLINE
DN 91162758 PubMed ID: 1705995
TI **Antigenic** and genetic variation in cytopathic **hepatitis A** virus variants arising during persistent infection: evidence for genetic recombination.
AU Lemon S M; Murphy P C; Shields P A; Ping L H; Feinstone S M; Cromeans T; Jansen R W
CS Department of Medicine, University of North Carolina, Chapel Hill 27599-7030.
NC RO1-AI22279 (NIAID)
SO JOURNAL OF VIROLOGY, (1991 Apr) 65 (4) 2056-65.
Journal code: 0113724. ISSN: 0022-538X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
OS GENBANK-M59808; GENBANK-M59809; GENBANK-M59810; GENBANK-M61066; GENBANK-M61067; GENBANK-M61068; GENBANK-M61069; GENBANK-M61070; GENBANK-M61071; GENBANK-M64492
EM 199104
ED Entered STN: 19910505
Last Updated on STN: 19970203
Entered Medline: 19910417
AB Variants of **hepatitis A** virus (pHM175 virus) recovered from persistently infected green monkey kidney (BS-C-1) cells induced a cytopathic effect during serial passage in BS-C-1 or fetal rhesus kidney (FRhK-4) cells. Epitope-specific radioimmunofocus assays showed that this virus comprised two virion populations, one with altered antigenicity including neutralization resistance to monoclonal antibody K24F2, and the other with normal **antigenic** characteristics. Replication of the

antigenic variant was favored over that of virus with the normal **antigenic** phenotype during persistent infection, while virus with the normal **antigenic** phenotype was selected during serial passage. Viruses of each type were clonally isolated; both were cytopathic in cell cultures and displayed a rapid replication phenotype when compared with the noncytopathic passage 16 (p16) HM175 virus which was used to establish the original persistent infection. The two cytopathic virus clones contained 31 and 34 nucleotide changes from the sequence of p16 HM175. Both shared a common 5' sequence (bases 30 to 1677), as well as sequence identity in the P2-P3 region (bases 3249 to 5303 and 6462 to 6781) and 3' terminus (bases 7272 to 7478). VP3, VP1, and 3Cpro contained different mutations in the two virus clones, with amino acid substitutions at residues 70 of VP3 and 197 and 276 of VP1 of the **antigenic** variant. These capsid mutations did not affect virion thermal stability. A comparison of the nearly complete genomic sequences of three clonally isolated cytopathic variants was suggestive of genetic recombination between these viruses during persistent infection and indicated that mutations in both 5' and 3' nontranslated regions and in the **nonstructural** proteins 2A, 2B, 2C, 3A, and 3Dpol may be related to the cytopathic phenotype.

L5 ANSWER 12 OF 21 MEDLINE
AN 92113333 MEDLINE
DN 92113333 PubMed ID: 1309847
TI Host antibody response to viral structural and **nonstructural** proteins after hepatitis A virus infection.
AU Summers D F; Ehrenfeld E
CS Department of Cellular, Viral and Molecular Biology, University of Utah School of Medicine, Salt Lake City 84132.
NC AI-26350 (NIAID)
SO JOURNAL OF INFECTIOUS DISEASES, (1992 Feb) 165 (2) 273-80.
Journal code: 0413675. ISSN: 0022-1899.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199202
ED Entered STN: 19920308
Last Updated on STN: 19980206
Entered Medline: 19920220
AB Subgenomic **hepatitis A** virus (**HAV**) RNA sequences were translated in vitro to produce proteins representing the structural (P1) and **nonstructural** (P2 and P3) domains of the viral polyprotein. These proteins were used as **antigens** to detect the presence of antibodies in sera from acute and convalescent humans and an experimentally infected chimpanzee. All infected individuals tested had antibodies that recognized uncleaved P1 proteins as well as **nonstructural** proteins. Antibodies in sera from infected individuals recognized conformation-dependent epitopes that were sensitive to SDS and heat treatment. Time-course studies of the experimentally infected chimpanzee showed that antibodies to the **HAV** proteins were detectable between 24 and 31 days after infection and persisted for greater than 6 months. Human sera remained positive for antibodies to both structural and **nonstructural antigens** for at least 2 1/2 years. The data suggest that **HAV nonstructural** proteins could be used as serologic markers for **HAV** diagnosis and for evaluating field trials of inactivated **vaccines**.

L5 ANSWER 10 OF 21 MEDLINE
AN 93118358 MEDLINE
DN 93118358 PubMed ID: 1335637

TI Serological approaches to distinguish **immune** response to **hepatitis A vaccine** and natural infection.
AU Robertson B H; Jia X Y; Tian H; Margolis H S; Summers D F; Ehrenfeld E
CS Hepatitis Branch A33, Centers for Disease Control, Atlanta, GA 30333.
SO VACCINE, (1992) 10 Suppl 1 S106-9.
Journal code: 8406899. ISSN: 0264-410X.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199302
ED Entered STN: 19930219
Last Updated on STN: 19980206
Entered Medline: 19930201
AB Currently, the **immune** status of an individual exposed to **hepatitis A** virus (**HAV**) is determined by assays which measure antibodies against the capsid proteins. These assays indicate exposure to the viral capsid that could result from either infection or from vaccination. Recent data indicate that proteins from the **non-structural** genome region of the virus (P2 or P3), which are only produced during active virus replication, generate antibodies after clinical disease. A sub-genomic cDNA segment of **HAV** corresponding to the P2 region was used for in vitro transcription-translation followed by **immune** precipitation of the translated products under non-denaturing conditions. Serial serum specimens from experimentally infected chimpanzees and humans naturally infected with **hepatitis A** verified the development of antibodies to **P2 proteins** following infection. A serosurvey of individuals positive for antibodies to the **HAV** capsid (**HAV** AB assay, Abbott Laboratories) revealed that 50-60% of children and 16-32% of adults had no detectable antibodies to the P2 **antigen** by **immune** precipitation. These results may reflect subclinical infections resulting in a lower level of antibodies against the **non-structural antigens** or may represent a greater sensitivity of the competitive assay (**HAV** AB) used to detect capsid antibodies compared to the immunoprecipitation assay used to detect **non-structural antigens**
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L5 ANSWER 8 OF 21 MEDLINE
AN 93294557 MEDLINE
DN 93294557 PubMed ID: 8390561
TI Antibody response to **nonstructural** proteins of hepatitis A virus following infection.
AU Robertson B H; Jia X Y; Tian H; Margolis H S; Summers D F; Ehrenfeld E
CS Hepatitis Branch, Centers for Disease Control, Atlanta, Georgia 30333.
NC AI26350 (NIAID)
SO JOURNAL OF MEDICAL VIROLOGY, (1993 May) 40 (1) 76-82.
Journal code: 7705876. ISSN: 0146-6615.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199307
ED Entered STN: 19930806
Last Updated on STN: 19980206
Entered Medline: 19930722
AB The **nonstructural** proteins of **hepatitis A** virus (**HAV**), produced during active virus replication, are alternative **antigens** that could be used to differentiate disease from inactivated **vaccine**-induced antibodies. An assay based on

immune precipitation of **proteins** translated from transcripts of the **P2** region of viral cDNA was used to evaluate the development of antibodies after natural infection or vaccination. Antibodies against **P2 proteins** were found in all sera from clinical cases of **hepatitis A** following the acute phase. Chimpanzees vaccinated with inactivated or cell-adapted **HAV** had no detectable antibodies against P2 products, either before or after wild type virus challenge. A serosurvey of sera positive for total anti-**HAV** (HAVAB, Abbott Laboratories, North Chicago) suggested that some individuals had no detectable antibodies to the P2 **antigen** by **immune** precipitation. These results were attributed to the lower sensitivity of the immunoprecipitation assay, since antibodies to capsid proteins, as measured by immunoprecipitation, were also not detected in most of these sera.

L5 ANSWER 6 OF 21 MEDLINE
AN 94113986 MEDLINE
DN 94113986 PubMed ID: 8285926
TI [Synthesis and **antigenic** activity of **peptides** from the C-terminal part of the NS4-protein of the **hepatitis A** virus].
Sintez i antigennaia aktivnost' peptidov iz C-kontsevoi chasti nestrukturnogo NS4-belka virusa gepatita C.
AU Semiletov Iu A; Firsova T V; Kuzin S N; Khudiakov Iu E; Shibnev V A
SO BIOORGANICHESKAIA KHIMIIA, (1993 Nov) 19 (11) 1128-31.
Journal code: 7804941. ISSN: 0132-3423.
CY RUSSIA: Russian Federation
DT Letter
LA Russian
FS Priority Journals
EM 199402
ED Entered STN: 19940228
Last Updated on STN: 19970203
Entered Medline: 19940217
AB A set of four **peptides** from the HCV NS4-protein C-terminal region (aa 1921-1940) were obtained by solid-phase synthesis using activated esters and symmetrical anhydrides of Boc-amino acids. **Peptide** 1921-1940 has demonstrated a positive reaction in ELISA with individual anti-HCV-positive sera from patients with acute and chronic hepatitis C (80% and 56%, respectively). We analysed the antigenic properties of the **peptide** 1921-1940 and its **fragments** and suggested at least two antibody recognizing sites to be contained in this region.

L5 ANSWER 2 OF 21 MEDLINE
AN 96226015 MEDLINE
DN 96226015 PubMed ID: 8627228
TI Identification of hepatitis A virus **non-structural** protein 2B and its release by the major virus protease 3C.
AU Gosert R; Cassinotti P; Siegl G; Weitz M
CS Institute for Clinical Microbiology and Immunology, St Gallen, Switzerland.
SO JOURNAL OF GENERAL VIROLOGY, (1996 Feb) 77 (Pt 2) 247-55.
Journal code: 0077340. ISSN: 0022-1317.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199606
ED Entered STN: 19960708
Last Updated on STN: 20000303

Entered Medline: 19960627

AB The RNA genome of **hepatitis A** virus (**HAV**) encodes a giant polyprotein that is putatively cleaved proteolytically into four structural and seven **non-structural** proteins. So far, most of the proposed **non-structural** proteins and their respective cleavage sites have not been identified. A vaccinia virus recombinant (vRGORF) containing the complete **HAV** ORF under the control of the bacteriophage T7 promoter was used to express **HAV** in recombinant animal cells (BT7-H) that constitutively expressed T7 DNA-dependent RNA polymerase. A **HAV**-specific 27.5 kDa expression product was identified as **peptide** 2B. The 27.5 kDa 2B **antigen** was also found in **HAV**-infected MRC-5 cells. The N-terminal amino acid residues of the new **peptide** 2B are Ala-Lys-Ile-Ser-Leu-Phe and polyprotein cleavage between 2A and 2B occurred at amino acids 836-837 (Gln-Ala). Furthermore, heterologous expression in the same system of regions P1-P2 and of the protease 3C (3Cpro) gene, showed that P1-P2 polyprotein is not cleaved autocatalytically but by 3Cpro. Hence, 3Cpro is effective in cleaving the polyprotein 2A-2B junction.

L7 ANSWER 1 OF 11 MEDLINE
TI Detection of antibodies to the **nonstructural** 3C proteinase of hepatitis A virus.
AU Stewart D R; Morris T S; Purcell R H; Emerson S U
SO JOURNAL OF INFECTIOUS DISEASES, (1997 Sep) 176 (3) 593-601.
Journal code: 0413675. ISSN: 0022-1899.

L7 ANSWER 2 OF 11 MEDLINE
TI Hepatitis E.
AU Purdy M A; Krawczynski K
SO GASTROENTEROLOGY CLINICS OF NORTH AMERICA, (1994 Sep) 23 (3) 537-46. Ref: 60
Journal code: 8706257. ISSN: 0889-8553.

L7 ANSWER 3 OF 11 MEDLINE
TI Attenuated hepatitis A virus: genetic determinants of adaptation to growth in MRC-5 cells.
AU Funkhouser A W; Purcell R H; D'Hondt E; Emerson S U
SO JOURNAL OF VIROLOGY, (1994 Jan) 68 (1) 148-57.
Journal code: 0113724. ISSN: 0022-538X.

L7 ANSWER 4 OF 11 MEDLINE
TI Hepatitis E: review.
AU Uchida T
SO GASTROENTEROLOGIA JAPONICA, (1992 Oct) 27 (5) 687-96. Ref: 55
Journal code: 0152744. ISSN: 0435-1339.

L7 ANSWER 5 OF 11 MEDLINE
TI Intermolecular cleavage of hepatitis A virus (HAV) precursor **protein** P1-**P2** by recombinant HAV proteinase 3C.
AU Kusov Y Y; Sommergruber W; Schreiber M; Gauss-Muller V
SO JOURNAL OF VIROLOGY, (1992 Nov) 66 (11) 6794-6.
Journal code: 0113724. ISSN: 0022-538X.

L7 ANSWER 6 OF 11 MEDLINE
TI Detection of hepatitis A virus proteins in infected BS-C-1 cells.
AU Updike W S; Tesar M; Ehrenfeld E
SO VIROLOGY, (1991 Nov) 185 (1) 411-8.
Journal code: 0110674. ISSN: 0042-6822.

L7 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2003 ACS
TI Processing of E1 and E2 glycoproteins of hepatitis C virus expressed in mammalian and insect cells
AU Matsuura, Yoshiharu; Suzuki, Tetsuro; Suzuki, Ryosuke; Sato, Mitsuru; Aizaki, Hideki; Saito, Izumu; Miyamura, Tatsuo
SO Virology (1994), 205(1), 141-50
CODEN: VIRLAX; ISSN: 0042-6822

L7 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2003 ACS
TI Proteolytic activity of hepatitis A virus 3C protein
AU Jia, Xi Yu; Ehrenfeld, Ellie; Summers, Donald F.
SO Journal of Virology (1991), 65(5), 2595-600
CODEN: JOVIAM; ISSN: 0022-538X

L7 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2003 ACS
TI Attenuation and cell culture adaptation of hepatitis A virus (HAV): a genetic analysis with HAV cDNA
AU Cohen, Jeffrey I.; Rosenblum, Betsy; Feinstone, Stephen M.; Ticehurst, John; Purcell, Robert H.
SO Journal of Virology (1989), 63(12), 5364-70
CODEN: JOVIAM; ISSN: 0022-538X

L7 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2003 ACS
TI Expression of hepatitis A virus capsid sequences in insect cells
AU Harmon, Shirley A.; Johnston, Jeffrey M.; Ziegelhoffer, Thomas; Richards, Oliver C.; Summers, Donald F.; Ehrenfeld, Ellie
SO Virus Research (1988), 10(2-3), 273-80
CODEN: VIREDF; ISSN: 0168-1702

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TI Detection of antibody to **hepatitis A** virus **nonstructural** proteins by **immunoassay**.
AU Cromeans, T. L. (1); Robertson, B. H. (1); Malcolm, B. A.; Margolis, H. S. (1)
SO Abstracts of the Interscience Conference on Antimicrobial Agents and Chemotherapy, (1996) Vol. 36, No. 0, pp. 174.
Meeting Info.: 36th ICAAC (International Conference of Antimicrobial Agents and Chemotherapy) New Orleans, Louisiana, USA September 15-18, 1996

WEST Search History

DATE: Sunday, April 06, 2003

Set Name side by side	Query	Hit Count	Set Name result set
	DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=OR		
L6	L4 and ((hepatitis adj A or HAV).clm. or (hepatitis adj A or HAV).ab.)	24	L6
L5	L4 and (hepatitis adj A or HAV).clm. or (hepatitis adj A or HAV).ab.	982	L5
L4	L3 and l2	57	L4
L3	l1 and (hepatitis adj A or HAV) with (vaccine or immunogen$ or antigen$)	1043	L3
L2	L1 and (peptide or protein or fragment or epitope) same (nonsturctural non-structural P2A)	85	L2
L1	(hepatitis adj A or HAV) same (vaccine or immunogen$ or antigen$)	1312	L1

END OF SEARCH HISTORY